

GPSMAP 392/398 **GPSMAP 492/498**

chartplotter receiver



GPSMAP 498 shown

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INTRODUCTION

Thank you for choosing the Garmin® GPSMAP® 392/398/492/498. The GPSMAP 392/398/492/498 utilizes the proven performance of Garmin GPS and full-featured mapping to create an unsurpassed portable GPS receiver. Take a moment now to compare the contents of this package with the packing list on the outside of the box. If any pieces are missing, contact your Garmin dealer immediately.

Before you begin working with the GPSMAP 392/398/492/498, review the installation instructions listed in the Appendix. If you have any question about installing your chartplotter, contact Garmin Product Support or a professional installer.

The GPSMAP 392/398/492/498 Sounder is CANet compatible. See the CANet accessory installation instructions for more information.

About This Manual

To get the most out of your new navigation system, take time to read this manual and learn the operating procedures for your unit in detail. This manual is organized into the following sections.

The **Introduction** section contains the Table of Contents as well as GPSMAP 392/398/492/498 care information.

The **Basic Operation** section provides you with detailed information and step-by-step directions for features such as using the Find Menu, navigating a route, and using waypoints.

The **Main Pages** section provides detailed explanations about each page in the GPSMAP 392/398/492/498 and step-by-step directions on using the pages.

The **Main Menu** section provides detailed explanations about the Main Menu and how to use it to configure your unit.

The **Using Sonar** section provides detailed explanations about the Sonar and Flasher Pages and how to configure your sonar options.

The **Appendix** contains installation instructions, specifications, optional accessories, and maintenance information. You can also find warranty and FCC information in the Appendix.

An **Index** is provided at the end of the manual for reference.

Manual Conventions

This manual uses the term **Warning** to indicate a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

This manual uses the term **Caution** to indicate a potentially hazardous situation, which, if not avoided, may result in minor injury or property damage.

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Warning

Failure to avoid the following potentially hazardous situations could result in an accident or collision resulting in death or serious injury.

When navigating, carefully compare information displayed on the GPSMAP 392/398/492/498 to all available navigation sources, including information from visual sightings, and maps. For safety, always resolve any discrepancies or questions before continuing navigation.

Use the electronic chart in the GPSMAP 392/398/492/498 only to facilitate, not to replace, the use of authorized government charts. Official government charts and notices to mariners contain all information needed to navigate safely.

WARNING: This product, its packaging, and its components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This Notice is being provided in accordance with California's Proposition 65. If you have any questions or would like additional information, please refer to our Web site at <http://www.garmin.com/prop65>.



Caution

Failure to avoid the following potentially hazardous situations may result in injury or property damage.

Use the GPSMAP 392/398/492/498 only as a navigational aid. Do not attempt to use the GPSMAP 392/398/492/498 for any purpose requiring precise measurement of direction, distance, location, or topography.

The Global Positioning System (GPS) is operated by the United States

government, which is solely responsible for its accuracy and maintenance. The government's system is subject to changes which could affect the accuracy and performance of all GPS equipment, including the GPSMAP 392/398/492/498. Although the GPSMAP 392/398/492/498 is a precision navigation device, any navigation device can be misused or misinterpreted and, therefore, become unsafe.

Map Data Information: One of the goals of Garmin is to provide customers with the most complete and accurate cartography that is available to us at a reasonable cost. We use a combination of governmental and private data sources, which we identify in product literature and copyright messages displayed to the consumer. Virtually all data sources contain inaccurate or incomplete data to some extent. In some countries, complete and accurate map information is either not available or is prohibitively expensive.



- LAMP(S) INSIDE THIS PRODUCT MAY CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE, OR FEDERAL LAWS.

The California Electronic Waste Recycling Act of 2003 requires the recycling of certain electronics. For more information on the applicability to this product, see www.ecycle.org.

Care Information

Cleaning the Unit

The GPSMAP 392/398/492/498 is constructed of high quality materials and does not require user maintenance other than cleaning. Clean the unit using a cloth dampened with a mild detergent solution and then wipe dry. Avoid chemical cleaners and solvents that can damage plastic components.

Storing the GPSMAP 392/398/492/498

Do not store the GPSMAP 392/398/492/498 where prolonged exposure to temperature extremes can occur (such as in the trunk of a car) as permanent damage can result. User information, such as waypoints and routes are retained in the unit's memory without the need for external power. It is always a good practice to back up important user data by manually recording it or downloading it to a PC (transferring it to MapSource.)

Immersing the Unit in Water

The GPSMAP 392/398/492/498 is waterproof to IEC Standard 60529 IPX7. It can withstand immersion in 1 meter of water for 30 minutes. Prolonged submersion can cause damage to the unit. After submersion, be certain to wipe and air dry the unit before reuse.

To resolve problems that cannot be remedied using this manual, contact Garmin Product Support in the U.S. at 800/800-1020 or Garmin Europe at 44/0870-8501241.

BASIC OPERATION

Initializing the Receiver

The first time you turn on the GPSMAP 392/398/492/498, the receiver must be given an opportunity to collect satellite data and establish its present location. To ensure proper initialization, the GPSMAP 392/398/492/498 is shipped from the factory in AutoLocate Mode.

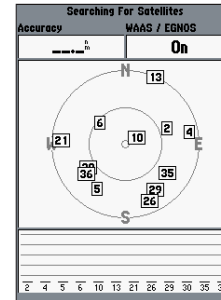
Before you initialize, make sure the GPSMAP 392/398/492/498 unit and antenna are correctly installed on your vessel according to the instructions in the “Appendix.” Install the antenna in a location with a clear and unobstructed view of the sky.

A full-screen GPS Information Page is shown after you press **ENTER** to acknowledge the Warning Page. The page goes away after the unit gets a position fix, or you press either **ENTER** or **QUIT**.

To turn on the GPSMAP 392/398/492/498:

1. Press and hold the **POWER** key until the power tone sounds, then release the **POWER** key. The title page, and then the Warning Page appears while the unit conducts a self-test.
2. When the self-test is complete, press **ENTER** to agree and acknowledge the warning.

3. Press **ENTER** to answer **NO** to the window asking “Do you want to start the Retail Demonstration?”. You are only asked this the first time you start the unit.



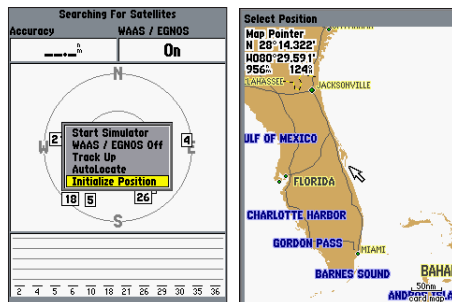
The GPS Information Page appears as the receiver begins acquiring satellites.

To turn off the GPSMAP 392/398/492/498:

1. Press and hold the **POWER** key.
2. When the screen is blank, release the **POWER** key.

To graphically initialize the GPSMAP 392/398/492/498:

1. Press and hold **ADJ/MENU** for the Main Menu. Press up or down on the **ROCKER** until the **GPS** tab is highlighted, and then press **ADJ/MENU** once.
2. Using the **ROCKER**, highlight **Initialize Position**, and press **ENTER**. The Initialize Position Page appears, prompting you to select your approximate location with the map pointer.



3. Use the **ROCKER** to move the map pointer to your approximate location within 200 miles. If you have difficulty identifying your location, press and release the **RANGE Down** key to see the next lower map range.

4. After you have determined your approximate location on the map, press **ENTER**.



NOTE: This does not calibrate the unit in any way, rather it helps to speed up the initial satellite acquisition. If the unit shows “Ready for Navigation” during this process, it is not necessary to initialize the unit.

The unit now begins searching for the appropriate satellites for your region and should acquire a fix within a few minutes. When viewing the GPS tab on the Main Menu, a signal strength bar for each satellite in view appears on the bottom of the page, with the appropriate satellite number under each bar.

- **No signal strength bars**—the receiver is looking for the satellites indicated.
- **Hollow signal strength bars**—the receiver has found the indicated satellite(s) and is collecting data.
- **Solid signal strength bars**—the receiver is ready to use.

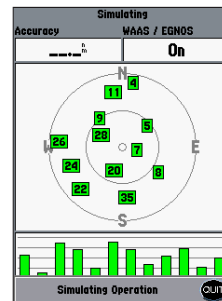
When the receiver has collected information from at least three satellites, the top of the screen shows either “Ready for Navigation”, and the GPSMAP 392/398/492/498 is ready for use.

Simulator Mode

Simulator Mode turns the GPS receiver off for use indoors or practice. You can perform any of the functions discussed in the following pages in Simulator Mode. Keep in mind that the GPSMAP 392/398/492/498 does not track satellites in Simulator Mode, and this mode should never be used for actual navigation. All the waypoint and route planning completed in Simulator Mode is retained in memory for future use.



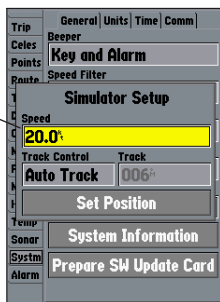
WARNING: Do not attempt to navigate using Simulator Mode. When the unit is set to Simulator Mode, the GPS receiver is turned off. Any satellite signal strength bars shown are only simulations and do not represent the strength of actual satellite signals.



To place the GPSMAP 392/398/492/498 in Simulator Mode:

1. Press and hold **ADJ/MENU** to show the Main Menu. Use the **ROCKER** to highlight the **GPS** tab, and then press **ADJ/MENU** once.
2. Use the **ROCKER** to highlight **Start Simulator**, and press **ENTER**.
3. Press **QUIT** to confirm the **Running Simulator** message that appears at the bottom of the screen. If the status bar is turned on, "Simulating" appears at the top of each of the main pages.
4. To turn off Simulator Mode, press **ADJ/MENU**, and select **Stop Simulator**.

The Set Position, Track Control, Track and Speed fields only show while in Simulator Mode.



To enter a simulated speed and heading from the Main Menu:

1. Press and hold **ADJ/MENU** to show the **Main Menu**.
2. Use the **ROCKER** to highlight the **System** tab, and then highlight the **Setup** button next to the Simulator field on the **General** sub tab. Press **ENTER**.
3. Highlight the **Speed** field, and then press **ENTER**. Use the **ROCKER** to enter a speed, and press **ENTER**.
4. Use the **ROCKER** to highlight **Track Control**. Press **ENTER**, and select **User Track**.
5. Highlight the **Track** field, and press **ENTER**. Use the **ROCKER** to set the track.
6. Highlight **Set Position**, and press **ENTER** to change the simulated location.
7. Press **QUIT** until you return to the Map Page.

To adjust the simulated speed and heading from the Compass or 3D Highway Pages:

1. Press up on the **ROCKER** increase the speed in 10 knot/kph/mph increments. Press down on the **ROCKER** to decrease the speed in the same increments.
2. Press left or right on the **ROCKER** to steer the boat.

Adjusting the Backlight

The adjustable screen backlighting is controlled with the **POWER** key, and can be adjusted from any page.



To adjust the backlighting:

1. Press and release the **POWER** key. The adjustment slider window appears.
2. Press the **POWER** key again and the user-defined level of backlighting starts. You can adjust this level by pressing up or down on the **ROCKER**. If you press **POWER** one more time, the backlight is at the maximum setting.
3. Press **ENTER** or **QUIT** when finished.

Interface Keys

POWER Key

- Press and hold to turn the unit on or off.
- Press and release to adjust backlighting.

PAGE Key

- Press to cycle through the main pages.
- Press to end an operation in progress and return to the main page.

QUIT Key

- Press and release to cancel data entry or exit a page.

ENTER/MARK Key

- Press and release to enter highlighted options and data or confirm on-screen messages.
- Press and hold at any time to mark your current location as a waypoint.

DATA/CNFG Key

- Press to toggle the display of a main page with or without data fields.
- Press and hold to show the Main Page Configuration window.



RANGE Down/RANGE Up Keys

- From the Map Page, press to zoom in or out.
- From the Sonar Page, press to scroll up or down the range list.

ROCKER Key

- Press up, down, right, or left to move through lists, highlight fields, on-screen buttons and icons, enter data, or move the map pointer.

ADJ/MENU Key

- Press and release to view options for a page.
- Press and hold to view the Main Menu.

NAV/MOB Key

- Press and release at any time to view the Navigation Menu.
- Press and hold for MOB waypoint.

FIND Key

- Press to search for points such as user waypoints, cities, and services.

Entering Data and Selecting Options

You can select and start options, and enter data to customize the GPSMAP 392/398/492/498 to fit your requirements. Use the **ENTER** key and the **ROCKER** to select options, enter names and numbers in data fields, and start your selections.

To select an optional feature:

1. With any page shown, press **ADJ/MENU** for the adjustment menu. The adjustment menu shows a list of optional features that are specific for that page. To select an option requires movement of the cursor. This is referred to as highlighting, selecting, or choosing an item.
2. Use the **ROCKER** to move the cursor (highlight) up and down a list or up, down, left, and right on menus.
3. After you highlight a selection, press **ENTER** to start the feature. Repeat this process to select an option from the list, or press **QUIT** to return to the previous setting.

To select an on-screen button:

Some pages contain on-screen buttons. Use the **ROCKER** to highlight an on-screen button, and press **ENTER**.

Review

Waypoint

☐ **SIMONE**

Comment

FISH SPOT 1

Position

N 28°13.591'
W080°31.959'

Depth

67.3'

Water temp

58.5'

Reference

Current Position

0.0' **006'**

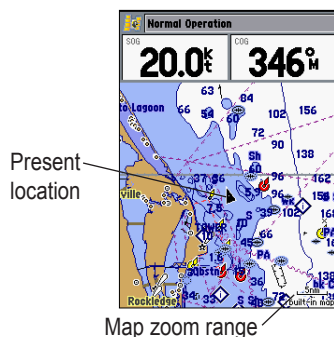
Add To Route Show Map

OK Move Wpt Delete

On-screen buttons

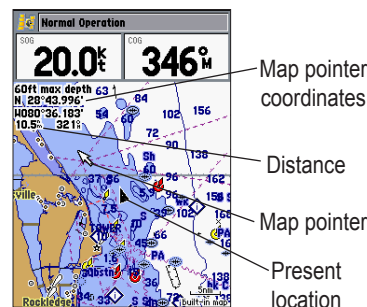
Using the Map Pointer

The map pointer is controlled by the **ROCKER**. You can pan to map locations, mark and edit waypoints and routes, and review position data of on-screen map items and waypoints. When you move the map pointer over a map item, a highlighted description of that item appears.



To pan the map:

1. Use the **RANGE Down/RANGE Up** keys to select a map zoom range.
2. Use the **ROCKER** to move the map pointer. A data field appears at the top of the screen showing the bearing and distance from your boat to the map pointer, along with the latitude/longitude of the map pointer.
3. Press **QUIT** to re-center your boat on the Map Page.



The Map Page actively scrolls or pans enabling you to explore areas around the world and create waypoints and routes. Press **QUIT** to return the map to your present location.



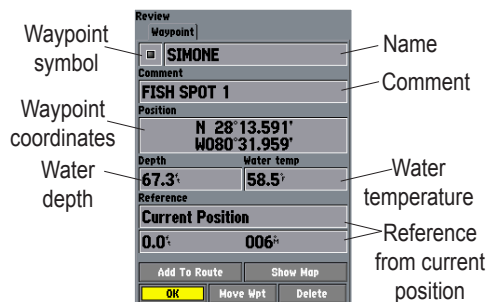
NOTE: When the map pointer reaches the edge of the map, the unit might pause as it loads new map data.

Creating and Using Waypoints

The GPSMAP 392/398/492/498 stores up to 3,000 alphanumeric waypoints with a user-defined symbol, comments, depth, and water temp, available for each waypoint. Waypoints can be created using two basic methods:

ENTER/MARK Key—marks your present location, and provides options to select a map location or map item from the Map Page. Also, you can enter a new waypoint's location coordinates manually.

Graphically—defines a new waypoint location from the Map Page using the **ROCKER**.



Waypoint Review Page

ENTER/MARK Key

Use the **ENTER/MARK** key to quickly capture your present location to create a new waypoint. The unit must have acquired at least three satellites to mark your present location. You can also use this option to manually enter waypoint coordinates.

To mark your present location:

1. Press and hold **ENTER/MARK** until the **New Waypoint** window appears. A default four-digit name and symbol are created for the new waypoint.
2. To accept the waypoint with the default name and symbol, highlight **OK**, and press **ENTER/MARK**.
3. To enter a different name, highlight the name field, and press **ENTER/MARK**. Use the **ROCKER** to enter the new alphanumeric name, and press **ENTER/MARK** when finished. You can use up to 10 characters for the name.
4. To select a different symbol, highlight the symbol field to the left of the name, and press **ENTER/MARK**. Use the **ROCKER** to highlight the new symbol, and press **ENTER/MARK**.

5. To enter optional comments or a depth, highlight the **Comments**, **Depth**, or **Water Temp**, and press **ENTER/MARK**, use the **ROCKER** to enter a value, and press **ENTER/MARK**.
6. To manually enter a set of coordinates, highlight the location coordinates, and press **ENTER/MARK**, use the **ROCKER** to enter the new coordinates, and press **ENTER/MARK** when finished.
7. Use the **ROCKER** to highlight **OK**. When finished, press **ENTER/MARK** to save the waypoint into memory.

Creating Waypoints Graphically

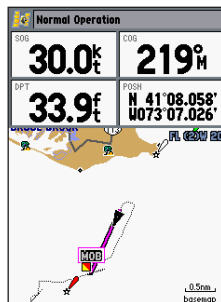
You create waypoints graphically from the Map Page. To mark a map location or map item, select the location or item with the map pointer, and press **ENTER**. When selecting a location or map item, a description of the point, its distance and bearing from your current location, and the latitude/longitude of the map pointer is shown along the top of the map.

To create a new waypoint graphically:

1. Use the **ROCKER** to move the map pointer to a map location. If you want to create the new waypoint at an on-screen map item, highlight the map item on the screen.
2. Press and release **ENTER/MARK** to capture the map pointer location. Do not hold the button down, doing so marks your present location, not the map location.
If you are not using a map item to create a waypoint, go to step 4.
3. Highlight **Create Wpt**, and press **ENTER/MARK**.
4. To accept the waypoint with the default name and symbol, press **ENTER/MARK**.
5. To change the name, symbol, or add a comment or depth, highlight the appropriate field, and press **ENTER/MARK**. Make your changes, and press **ENTER/MARK** when finished.
6. Highlight **OK**, and press **ENTER/MARK** to confirm the changes.

Man OverBoard (MOB)

The Man OverBoard function (MOB) simultaneously marks and sets a course back to the marked location for quick response to emergency situations.



The MOB function allows you to quickly start navigation back to a location.

To start the MOB function:

1. Press and hold **NAV/MOB**.
2. Press **ENTER** to begin navigating to the **MOB** location.
3. To stop navigation to the **MOB** location, press **NAV**, highlight **Stop Navigation**, and press **ENTER**.

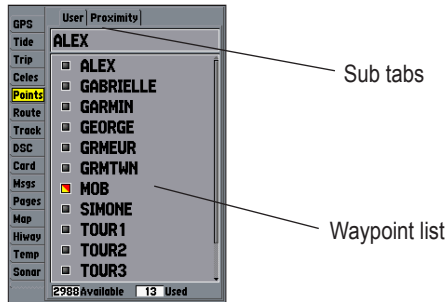
When a MOB is active, a MOB waypoint with an international MOB symbol is created and the unit is on an active navigation to that point. Use any of the Navigation Pages to guide you back to the MOB point. The MOB waypoint is stored in the waypoint list and works like any other waypoint.



To stop navigation, press **NAV/MOB** highlight **Stop Navigation**, and press **ENTER**.

Reviewing and Editing Waypoints

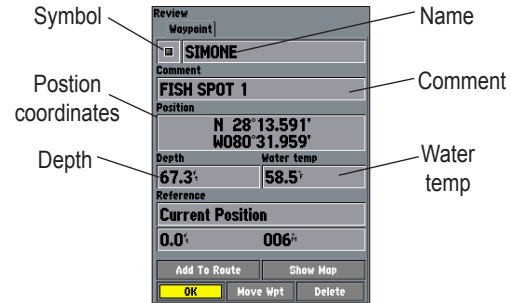
You can review, modify, rename, move, or delete waypoints at any time using the Waypoint Edit Page. The Waypoint Edit Page is available for any stored waypoint. Select the waypoint on the map or from the waypoint lists in the Main Menu—Points tab.



To access the Waypoint Edit Page:

1. Use the **ROCKER** to highlight the waypoint on the Map Page.
OR
Press and hold **ADJ/MENU**, highlight the **Points** tab, and choose a waypoint from the **User** or **Proximity** sub tabs.
2. Press **ENTER** to show the Waypoint Edit Page.

3. From the Waypoint Edit Page, change the name, symbol, comment, position coordinates, depth, or water temp for the selected waypoint. When finished, highlight **Next**, and press **ENTER** to save them. Press **QUIT** to cancel.



Waypoint Edit Page

To change the waypoint name:

1. Highlight the waypoint name field, and press **ENTER**.
2. Use the **ROCKER** to enter a new name, and press **ENTER** when finished.

To change the waypoint symbol:

1. Highlight the waypoint symbol field to the left of the waypoint name, and press **ENTER**.
2. Use the **ROCKER** to select a new symbol, and press **ENTER**.

To change the Comment, Location, Coordinates, Depth, or Water Temp:

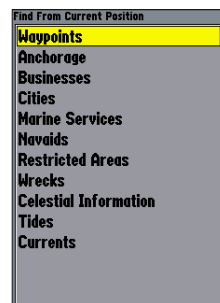
1. Highlight a field, and press **ENTER**.
2. Use the **ROCKER** to edit or enter the data. To move to the next character, press right on the **ROCKER**.
3. Press **ENTER** when finished.

To move the waypoint on the map:

1. From the Waypoint Edit Page, highlight **Move Wpt**, and press **ENTER**. A **MOVE** label now appears under the map pointer in addition to a distance, bearing, and coordinate window. You can also use the **RANGE Down** and **RANGE Up** keys to zoom the map. The map zoom range appears in the lower-right corner.
2. Use the **ROCKER** to point to the new location, and press **ENTER**.
3. To stop the move process, press **QUIT**.

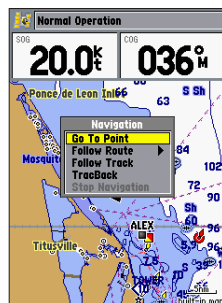
Navigating to a Destination***Using the Nav Key***

The **NAV** key provides four ways to navigate to a destination: Go To Point, Follow Route, Follow Track, and TracBack. When you are actively navigating, the Map Page shows a straight line from your current location to the destination. The Go To option is the easiest method for selecting a destination. A Go To allows you to select a destination point and quickly set a direct course from your present location. If you have a point highlighted on a list or the map, **Go To <point name>** appears in addition to **Go To Point**. The Go To function is accessed from any list of points or graphically from the Map Page.



To start a Go To from a point list:

1. Press **NAV**. Highlight **Go To Point**, and press **ENTER**.
2. From the **Find** menu, highlight **Waypoints** or another menu option, and press **ENTER**.
3. To select a waypoint from the waypoint lists, use the **ROCKER** to highlight either the **By Name** or **Nearest** tab, select a waypoint, and press **ENTER**.

**Selecting a Go To Graphically**

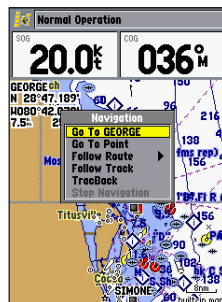
A Go To can be used to select one of three items from the Map Page: an existing waypoint, an on-screen map item such as roads, rivers, cities, and nav aids, or a new map point. If you are selecting a map item as the Go To destination, the GPSMAP 392/398/492/498 automatically uses the name of the map item, but the point is not stored in the waypoint list. See [page 8](#) for creating waypoints using map items. If you are selecting a new map point (non-map item) as the Go To destination, the GPSMAP 392/398/492/498 automatically creates a waypoint at the map pointer location.

To Go To an existing waypoint or map item from the Map Page:

1. Use the **ROCKER** to highlight the waypoint or on-screen map item.
2. Press **NAV**. **Go To <waypoint name>** appears.
3. Press **ENTER** to start navigating to the waypoint.

To Go To a new map point (non-map item):

1. Use the **ROCKER** to move the map pointer to location.
2. Press **NAV**.
3. With **Go To MAP Point** highlighted, press **ENTER**.

***TracBack Navigation (Navigating a Track)***

The TracBack function retraces your path to the starting point using the track log automatically stored in the receiver's memory. This feature eliminates the need to store waypoints along the way. TracBack routes are created by reducing your track log into a route of up to 300 turns and activating an inverted route along those points. When started, a TracBack route leads you back to the oldest stored track log point, so it is a good idea to clear the existing track log before you start your current trip.

To clear the track log:

1. Press and hold **ADJ/MENU** to show the Main Menu.
2. Using the **ROCKER**, highlight the **Track** tab, and then highlight the **Active** sub tab.
3. Use the **ROCKER** to select the **Clear** button, and press **ENTER**.
4. Highlight **OK**, and press **ENTER**.

To save a track log:

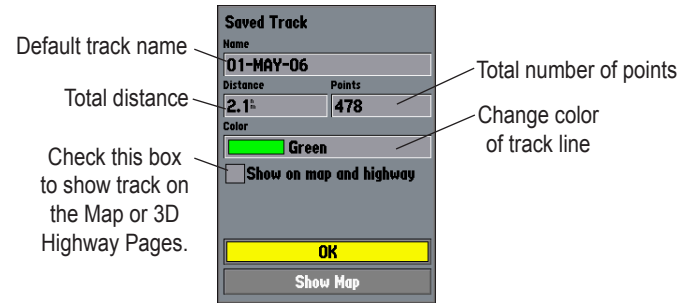
1. From the Main Menu, use the **ROCKER** to highlight the **Track** tab, then highlight the **Active** sub tab to the right.
2. Use the **ROCKER** to select **Save**, and press **ENTER**.
3. From the **Save Back Through** window, highlight time, date, or Entire Log, and press **ENTER**. When the track is saved, the **Save Track** window appears. The default name, distance, number of points (700 max), and color are shown in the **Save Track** window.

To change the name of the saved track, highlight the name field, and press **ENTER**. Make your changes and press **ENTER**.

To show the track on the Map and 3D Highway Pages, highlight the check box to the left of **Show on map and highway**, and press **ENTER**.

To view the track on the map, highlight **Show Map**, and press **ENTER**.

4. Highlight **OK**, and press **ENTER** to save the track.



To start a TracBack using the NAV key:

1. Press **NAV**, highlight **TracBack**, and press **ENTER**.
2. To stop TracBack navigation, press **NAV**, highlight **Stop Navigation**, and press **ENTER**.

When a TracBack is active, the GPSMAP 392/398/492/498 takes the track log currently stored in memory and divides it into segments called legs. Up to 300 temporary turns (BEGIN, TURN 1, TURN 2, TURN 3, ..., TURN X, END) are created to mark the most significant features of the track log in order to duplicate your exact path as closely as possible. To get the most out of the TracBack feature, remember the following tips:

- Always clear the track log at the starting point.
- Set the Record Mode option on the track log setup page to **Fill** or **Wrap**.
- The track log memory must contain at least two points to create a TracBack route.
- If the track log interval is set to the **Time** option, the route can not follow your exact path. For best performance, keep the interval set to **Resolution**.
- If the receiver is turned off or satellite coverage is lost during your trip, the TracBack draws a straight line between any point where coverage was lost and where it resumed.

- If the track log's changes in distance and direction are too complex, 300 waypoints might not mark your path accurately. The receiver then assigns the 300 waypoints to the most significant points of your track, and simplifies segments with fewer changes in direction.

For more information on setting up the Track options and saved tracks, see [page 57](#).

Following a Track

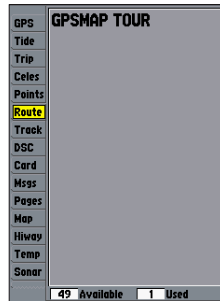
The Following a Track function retraces a track from the beginning, the oldest time, to the end, the newest time. You can only use this function with Saved Tracks. To save a track, refer to the instructions on [page 15](#).

To Follow a Track:

1. Press **NAV**, highlight **Follow Track**, and press **ENTER**.
2. Highlight the track you want to follow, and press **ENTER**.
3. To stop Follow Track navigation, press **NAV**, highlight **Stop Navigation**, and press **ENTER**.

Creating and Using Routes

You can create and store up to 50 user-defined reversible routes (numbered 1-50), with up to 300 points each.



Route Tab

To navigate a QUICK NAV route:

1. Press **NAV/MOB**, and highlight **Follow Route**.
2. Press **ENTER**, and highlight **Create QUICK NAV Route**.
3. Use the map pointer to select a waypoint or map item, and press **ENTER**.

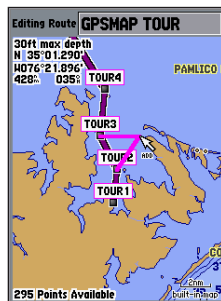
4. To add a new waypoint to the route, use the map pointer to select a map location, and press **ENTER**.

As you add each new waypoint to the route, the data window at the top of the Map Page shows the waypoint/map item name, bearing and distance from your location, and coordinates of the map pointer. The bottom of the screen shows the number of available points. A route line appears on the map to indicate each completed leg, and a dotted line appears indicating the distance and bearing to the map pointer from the last route waypoint.

5. Repeat steps 3 and 4 until you have finished defining all route waypoints.
6. Press **QUIT** twice to start your QUICK NAV Route.

To create a new route using the map window:

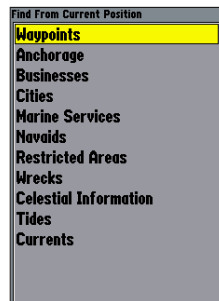
1. Press and hold **ADJ/MENU** to show the Main Menu.
2. Use the **ROCKER** to highlight the **Route** tab, and press **ADJ/MENU** to show the Route Options Page.
3. Select **New Route**, and press **ENTER**.
4. Follow steps 3 and 4 in the Navigating a QUICK NAV Route instructions.
5. When finished, press **QUIT** twice to return to the Route List Page.



ADD appears below the map pointer as you insert points.

To create a route using the Route list:

1. Press and hold **ADJ/MENU** to show the Main Menu.
2. Use the **ROCKER** to highlight the **Route** tab, and press **ADJ/MENU** to show the Route Options menu.
3. Select **New Route**, and press **ENTER**.
4. Press **ADJ/MENU**, select **Use List**, and press **ENTER**.
5. Use the **ROCKER** to highlight the first available blank route slot, and press **ENTER**.
6. Select a category, press **ENTER**, and select the first point in your route.
7. Repeat steps 5 through 6 until your route is complete, and then press **QUIT**.



Choose the category from which you want to add a route point.

To navigate a saved route:

1. From any page, press **NAV**.
2. Use the **ROCKER** to highlight **Follow Route**, and press **ENTER**.
3. Highlight **Pick From Saved List**, and press **ENTER**.
4. Highlight the route you want to navigate, and press **ENTER**.

To stop navigation of a route:

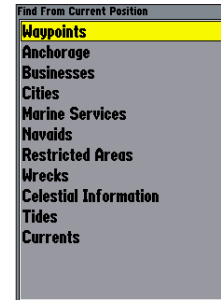
Press **NAV**, highlight **Stop Navigation**, and press **ENTER**.

The following options are available on the Navigation menu by pressing **NAV** while navigating a route:

- **Invert Route**—reverses the route so you can follow it from the end point back to the beginning.
- **Re-Evaluate Route**—recalculates and reactivates the current route data. Selects the route leg closest to your current location as the active leg (the active leg defines the current from and to waypoints).

Find

The **FIND** key searches the unit for Waypoints, Cities, Tides, Anchorages, Businesses, Exits, Nav aids, Restricted Areas, and Wrecks Obstructions. If you press **FIND** while in Pan Mode, the unit centers its search from the location where the map pointer is located. Your location or the map pointer must be within a map outline area to search for BlueChart g2 information.



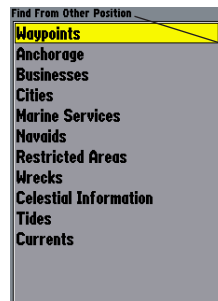
Find Items List

To Find an item from your current location:

1. From any page, press **FIND**.
2. Using the **ROCKER**, highlight a category from the list, and press **ENTER**.
3. For waypoints and cities, search using **By Name** or **Nearest**. Use the **ROCKER** to highlight a tab. For **By Name**, use the top field to spell out the name, or scroll down through the list. (See [page 8](#) for steps on entering a name.)

To Find an item from other locations:

1. From the Map Page, use the **ROCKER** to pan select a location, and press **FIND**.
2. Using the **ROCKER**, highlight a category from the list, and press **ENTER**.



You can also Find items using the Map Pointer.

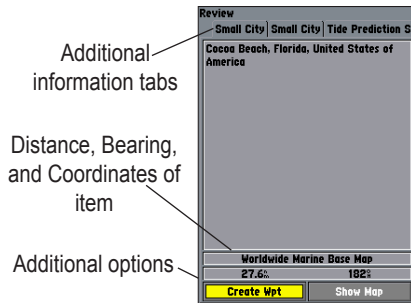
The Find option also supports a “find from” feature that centers your search around an item you have just found. For example, you search for “Restricted Areas” and you find a point named “Anchoring Prohibited.” If you press **FIND** again, “From Anchoring Prohibited” appears as the new find from point.

Additional Information

Each item on the map has information about the point available. The information varies depending on the type of data loaded on the optional data card. Sub tabs along the top of the detail window contain the information available for the item. Any additional options are shown along the bottom.

To view additional information for a Map item:

1. On the Map Page, use the **ROCKER** to highlight a map item, and press **ENTER**.
2. Use the **ROCKER** to highlight the individual tabs, and show the information. To scroll the text, highlight the field, and press **ENTER**. Use the **ROCKER** to scroll.



Information Window

DSC (Digital Selective Calling)

The DSC tab controls and sets up the DSC features on the GPSMAP 392/398/492/498.

DSC uses marine VHF radio and GPS technologies to transmit and receive location information. The chartplotter repeats the call properties received from the VHF radio on the chartplotter. The GPSMAP 392/398/492/498 requires input from a DSC-enabled VHF radio to show position, and sound/show alerts from a distress call or position report. Conversely, the VHF radio requires input from a GPS to transmit position coordinates for a distress call or position report. For connection information, refer to “Connecting the Power/Data Cable” on [page 92](#).

An emergency DSC distress call allows a vessel in trouble to transmit a substantial amount of information in a single transmission or call, without the need for voice communication. When any nearby rescuer receives the DSC signal, an alarm sounds and they immediately receive the location of the caller. The rescuer can choose to navigate to the caller’s location to assist, or forward the call on to the Coast Guard. When the Coast Guard receives the


call, they can immediately access the caller's information (such as who they are and the type of vessel) in their database while they are in transit to the caller's location.

A non-emergency DSC position report allows mariners to exchange and show the positions of one another. When a DSC position is received, the mariner can choose to create a waypoint or to show the received location on an electronic map.


Anytime a vessel receives a DSC call, they can store and quickly navigate to that location using a Go To. In order to use DSC, users must first register their VHF radio with the FCC and receive a Maritime Mobile Service Identity (MMSI) number. Garmin does not provide MMSI numbers.

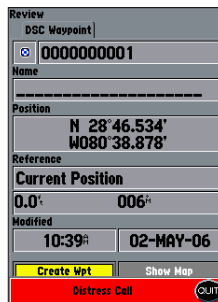
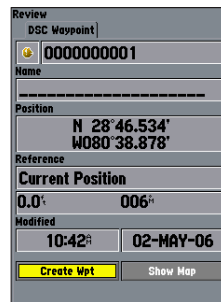
For more information about Digital Selective Calling and Maritime Mobile Service Identity (MMSI) numbers, refer to [page 97](#) in the "Appendix."

Understanding Distress Calls

When the GPSMAP 392/398/492/498 receives a distress call from a connected DSC-enabled VHF radio, an alert message and notification page are shown, and an alarm tone is sounded. Distress Calls are shown in the DSC Call List and Log with a checkered symbol .

Understanding Position Reports

A position report is similar to a distress call except no alarm is sounded. Position reports are not broadcast to all DSC users and are shown with a boat symbol .

Receiving DSC Calls

Each time you receive a distress call or position report, a Notification Page is shown, and the call is placed in the DSC Call List and Log. The Notification Page contains information about the call including: the type of call (distress or position report), the MMSI number of the caller, a user definable name, the time and date of the call, the bearing and distance from your current location, and the coordinates of the caller. To see the caller's location on a map, select the **Show Map** button. To create a waypoint at the caller's location, select the **Create Wpt** button. To close the Notification Page, press **QUIT**.

When a distress call or position report is placed in the Call List and Log, the information on the Notification Page is retained. To review a DSC call or log entry, highlight the entry and press **ENTER**. The DSC Entry Review Page is identical to the Notification Page with one exception, the entry can be deleted.

Review

DSC Waypoint

0000000001

Name

Position

N 28°46.534'
W080°38.878'

Reference

Current Position

0.0° 006°

Modified

10:42 02-MAY-06

Create Wpt Show Map

DSC Entry Review Page

To review a call or log entry:

1. Press and hold **ADJ/MENU** to open the Main Menu.
2. Open the **Call List** or **Log** from the **DSC** tab.
3. Press up or down on **ROCKER** to highlight the call you want to review.
4. Press **ENTER** to open the DSC Entry Review Page.

DSC Call List

The DSC Call List shows the 50 most recent calls, even if the unit is left unattended. The Call List shows the most recent call from a vessel. If a second call from the same vessel is received, it replaces the first call in the Call List. Press **MENU** to sort the list and delete entries.

DSC Log

When DSC calls are received, they are automatically placed in the Log, with the most recent call at the top. The unit can log up to 100 calls. When 100 calls are logged, the oldest log is removed when a new call is received. Press **MENU** to sort the list and delete entries.

DSC Directory

The DSC Directory acts much like a phone book and can hold up to 50 entries. Pressing **MENU** from this page shows options to add a **New Item**, **Delete** a highlighted entry, or **Delete All** entries.

To add a new Directory entry:

1. Open the **DSC Directory** in the Main Menu.
2. Use the **ROCKER** to highlight the first blank space in the directory list, and press **ENTER**.
OR
Press **MENU**, highlight **New Item**, and press **ENTER**.

3. Enter the MMSI number, a name, and any comments.
4. When finished, highlight **OK**, and press **ENTER**.

The screenshot shows a 'Directory Item Review' window. It has a sidebar with options: GPS, Tide, Trip, Cele, Point, Route, Track, DSC, Card, Message, Page, Map, Hwnd, Temp, and Sonar. The main area contains the following fields: Name (ALEXANDER), MMSI (000000001), Route (010101010), Name (SIMONE), DSC (SIMONE), and Comment. At the bottom, there are 'Delete' and 'OK' buttons. A status bar at the very bottom indicates '99 Available' and '1 Used'.

New Directory Item Page

When a distress call, position report, or directory item is named, the name is attached to that particular MMSI number. If a name is used, all DSC entries of the same MMSI number show the name.

Navigating to a Position Report or Distress Call

After a position report or a distress call is received, navigation can be quickly set to the call location.

The screenshot shows a 'Review DSC Waypoint' window. It displays the MMSI number 000000001 and the name ALEXANDER. A 'Navigation' menu is open, showing options: Go To DSC (highlighted), Go To Point, Follow Route, Follow Track, TrackBack, and Show Navigation. Other fields include Position, Reference, Current, and Modified (10:39, 02-MAY-06). At the bottom are buttons for Next, Show Map, Create Wpt, and Delete.

Navigating to a DSC Call

To navigate to a position report or distress call using the Nav key:

1. Press **NAV**.
2. With **Go To MMSI/Name** highlighted, press **ENTER**.

To navigate to a position report or distress call using the DSC alert page:

1. Highlight the call on the **Call List** or **Log**, and press **NAV**.
2. With **Go To MMSI/Name** or **DSC** highlighted, press **ENTER**.

Setting up DSC

The DSC Setup tab turns DSC chartplotter information screen **On** and **Off**. This also allows you to simulate distress calls and position reports while the unit is in Simulator Mode (see [page 3](#)). Simulating calls is helpful for practice before connecting to the real system. The distress call simulator also helps to check if alarms are working properly.



DSC Setup

AIS

AIS (Automatic Identification System) provides area traffic situational awareness. AIS provides ship IDs, position, course, and speed for ships equipped with a transponder within range.



NOTE: You must set your chartplotter communication to NMEA In / NMEA Out with a baud rate of 38400 to receive AIS information. Refer to [page 69](#) for information on changing communication settings.

AIS Setup options

AIS contains two setup options in the main menu.

- **AIS Vessels**—Auto, All Ranges, 30ft-800mi: sets the maximum zoom scale at which AIS vessels appear.
- **Heading Line**—Off, Time: draws an extension from the end of the boat icon in the direction of travel. For Time, enter the numeric time value you want the line to extend. The Time line length automatically adjusts as your speed changes.

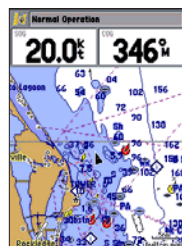
MAIN PAGES

There are four main pages that are always available: Map, Compass, 3D Highway, and Active Route. Pressing **PAGE** opens a Pages window. You can use the **ROCKER** or press **PAGE** repeatedly to cycle through the pages. Three more pages, Map Split, Sonar, and Flasher, are available when the GPSMAP 392/398/492/498 Sounder receives sonar input. For information on the Sonar, Flasher, and Map Split Pages, refer to the “Using Sonar” section on [page 72](#).

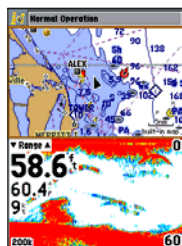
With the Map Page shown, press **PAGE** several times. Each time you press **PAGE** the next main page appears. Each main page has an Adjustment Menu, which contains the setup options and functions that apply to that page. Press **ADJ/MENU** to show the Option Menu. Use the **ROCKER** to select an item from the adjustment menu, and press **ENTER**.

Notice that either **PAGE** or **QUIT** stops the current function and returns you to the main page. If you find yourself lost in a menu or you start a function you do not want, press **PAGE** or **QUIT**.

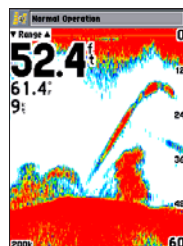
You can customize the main pages using the **DATA/CNFG** key. Press **DATA/CNFG** to remove the status bar and data fields from the top of any main page. Press and hold **DATA/CNFG** to customize the Main Pages.



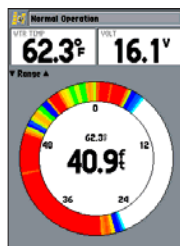
Map Page



Map Split Page



Sonar Page



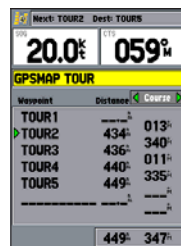
Flasher Page



Compass Page



3D Highway Page



Active Route Page

Map Page

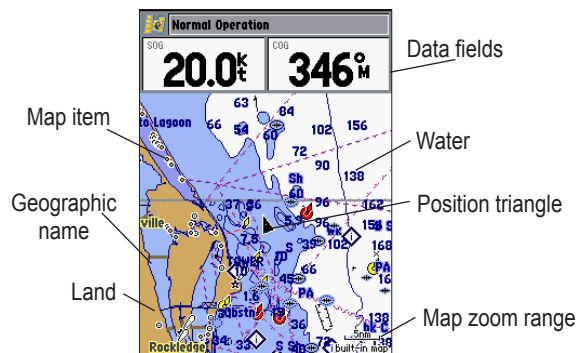
The Map Page provides a comprehensive display of electronic cartography, plotting, and navigational data. When using the unit with optional BlueChart or MapSource data, the Map Page shows your boat on a digital chart, complete with geographic names, map items, nav aids, and a host of other chart features. It also plots your track and shows any routes and waypoints you create. The map pointer allows you pan and scroll to other map areas, determine the distance and bearing to a location, and perform various route and waypoint functions.

When the map pointer is active, an additional data window appears at the top of the map to indicate the location, range, and bearing to the map pointer, a selected waypoint, or map item. The map zoom range shown at the lower-right corner of the Map.

The Zoom **RANGE Down** and **RANGE Up** keys combined with the **ROCKER**, allow you select zoom ranges and move the map pointer. Two basic map operating modes, Position Mode and Pan Mode, determine what cartography is shown on the Map Page. Position Mode moves the cartography to keep the present position marker within the screen area. Pan Mode moves the cartography to keep the map pointer within the screen area.

The GPSMAP 392/398/492/498 starts in Position Mode, with your location centered on the Map Page. When sufficient map coverage is not available to keep your location centered, the position triangle moves toward the edge of the screen.

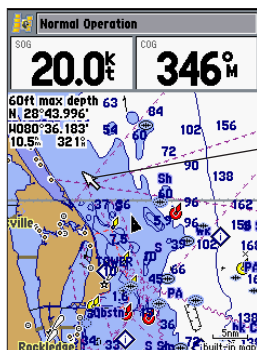
Pan Mode starts when the **ROCKER** is pressed. The map pointer is moved over the Map Page using the **ROCKER**. When the map pointer reaches the edge of the screen, the map scrolls forward under the map pointer.



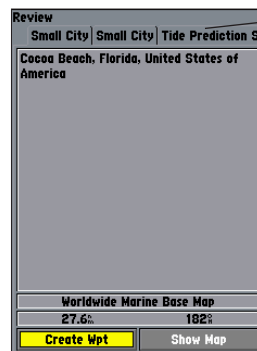
**Map Page shown Using
Built-In Cartography Data**

Using the Map Pointer

The map pointer pans away from your present location (even outside of your current detail coverage.) As you pan past the edge of the current Map Page, the screen actively scrolls forward to provide continuous map coverage. An hourglass symbol appears by the map pointer while the unit is busy drawing new map details.



As you move the map pointer, the distance and bearing from your present location to the map pointer is shown in the data window, along with the map pointer's location coordinates. Keep in mind that when the map pointer is stationary, the distance and bearing from your present position changes as your location moves. The map pointer can also be used to view on-screen waypoint and map item properties directly from the Map Page.



Additional information tabs

Pressing **ENTER** while highlighting a map item brings up additional details and options.

Additional options

To select an on-screen waypoint or map item with the map pointer:

1. Use the **ROCKER** to move the map pointer to a waypoint or map item. (If there are several waypoints grouped closely together, zoom in closer for a better view.) When a waypoint or map item is selected, it is highlighted on-screen, with the name and location shown.
2. Press **ENTER** to show details of the map item. When using BlueChart g2 or MapSource data, additional information tabs appear. Use the **ROCKER** to highlight the individual tabs, and show information and options.
3. Press **QUIT** to exit the review page.

Use the map pointer to create new waypoints directly from the map.

To create a waypoint with the map pointer:

1. Use the **ROCKER** to move the map pointer to the map location.
2. Press **ENTER**, and the New Map Waypoint window appears. (Do not hold down **ENTER**. Pressing and holding **ENTER** will mark a waypoint at your present position not at the map pointer's location.) If the map pointer is on a map item, press **ENTER**, and a new window with details about the item appears.
3. Press **ENTER** again on the highlighted **Create Wpt** option.
4. Press **ENTER** to confirm the new waypoint using the default four-digit name and symbol.

For more information about waypoints, see [page 8](#).

Selecting Map Zoom Ranges

The Map Page has 28 available range scales from 20 ft to 800 mi (5 m to 1,200 km.) The map zoom range is controlled by the **RANGE Down** and **RANGE Up** keys, with the current zoom range shown at the lower-right corner of the data window.

To select a map zoom range:

Press the **RANGE Up** key to zoom out and the **RANGE Down** key to zoom in.



NOTE: The zoom range value represents the distance from one end of the zoom range bar to the other.

5nm
built-in map

Using Built-In Basemap

3%
map card

Using BlueChart g2 or MapSource Data

2%
overzoom

Overzoom, no additional data is available

Cartography

The GPSMAP 392/398 system contains a preloaded U.S. inland freshwater cartography to its enhanced worldwide basemap information. The preloaded inland maps offer 50-meter shoreline resolution throughout the U.S., with even more detailed 10-meter resolution on select lakes. Other details include depth contours, tide and current data, boat ramps, mile markers, hazards, marinas, campgrounds, area roads, and more.

The GPSMAP 492/498 system contains preloaded marine map detail utilizing BlueChart® g2 technology. Coverage is for U.S. coastal areas, including Alaska and Hawaii. Features include integrated mapping, 2D or mariner's eye perspective, tide and current data, improved IALA symbols, nav aids, marinas, boat ramps, roads, and more.

Both units accept preprogrammed data cards and are compatible with the latest BlueChart® g2 series marine cartography. The unit shows cartography as long as there is chart information available for the range you have selected.

To change data field contents and configuration:

1. Press and hold **DATA/CNFG**. The Configuration window appears.
2. Using the **ROCKER**, highlight the function you want to add or remove, such as the status bar or first and second rows of data fields, and press **ENTER**. Only functions with a check mark in the check box to the left of the name appear on the main page.
3. Move the field highlight to the data field slider and use the **ROCKER** to select the number of data fields.
4. Move the field highlight to a data field, and press **ENTER**.
5. Using the **ROCKER** to move up or down on the list of data field options. Press **ENTER** to select an option.
6. To exit, press **QUIT**.

Map Page Options

Many features of the GPSMAP 392/398/492/498 are menu driven. Each main page has an options menu, allowing you to customize the corresponding page to your preferences and select special features that specifically relate to that page.

The Map Page provides access to functions and features relating to the Map Page.

To show and select the Map Page options:

1. Press **ADJ/MENU**.
2. Use the **ROCKER** to highlight an option, and press **ENTER**.

The available options are **Measure Distance**, **Show/Hide Detail**, and **Setup**.



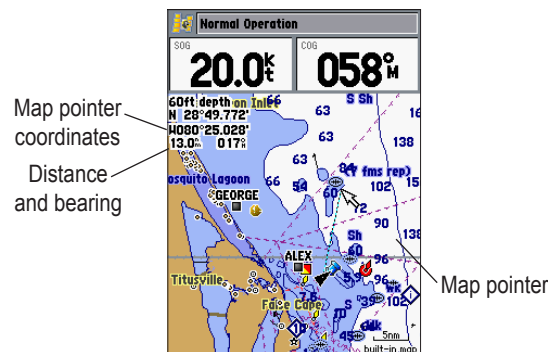
NOTE: Map Pointer, Highway, Location, and Sonar field options are only available on medium and large sized data fields.

Measure Distance—measures the bearing and distance between any two points on the Map Page.

Hide/Show Detail—hides and shows map details.

To measure the bearing/distance between two points:

1. Highlight **Measure Distance**, and press **ENTER**. An on-screen map pointer labeled **ENT REF** appears on the Map Page at your present location.
2. Move the map pointer to a reference point (the point that you want to measure from), and press **ENTER**.
3. Move the map pointer to the end measurement point. The bearing and distance from the reference point and map pointer coordinates is shown in the data window at the top of the screen. Press **QUIT** to finish.



Setup—configures the Map Page preferences, including map detail, map orientation, automatic zoom, and various map items and points. Refer to “Main Menu—Map Tab” on [page 61](#) for more information.

To change a map setup feature:

1. From the Map Page menu, highlight **Setup**, and press **ENTER**.
2. Press left or right on the **ROCKER** to highlight a tab. Press up or down on the **ROCKER** to highlight the setting you want to change, and press **ENTER**.
3. Press up or down on the **ROCKER** to highlight a setting, and press **ENTER**. To exit, press **QUIT**.

From the map setup page, you can access the following menu options by pressing **ADJ/MENU**:

- **All Map Defaults**—restores settings back to factory settings for all tabs.

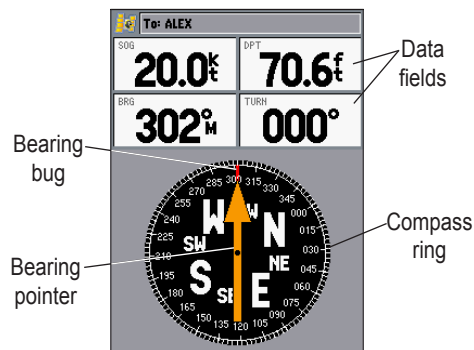
Compass Page

The Compass Page provides graphic steering guidance to a destination waypoint, with an emphasis on the bearing to your destination and current direction of travel. The middle of the page features a rotating compass ring that shows your course over ground (track) while you are moving, and a bearing pointer that indicates the direction of the destination (bearing) relative to the course over ground. The compass ring and map pointer work independently to show—at a glance—the direction of your movement and the direction to your destination. For instance, if the arrow points up, you are going directly to the waypoint. If the arrow points any direction other than up, turn toward the arrow until it points up, and then continue in that direction.

This page provides better steering guidance when traveling at slower speeds and when making frequent directional changes. When you are not navigating to a waypoint, the compass ring shows the current direction of travel but the arrow does not appear.



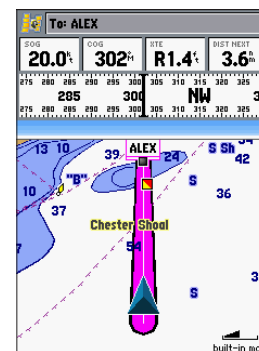
NOTE: The bearing pointer, bearing bug, and compass ring can point in various directions when you are stationary or at very low speeds. When you start moving, the map pointer is correct.



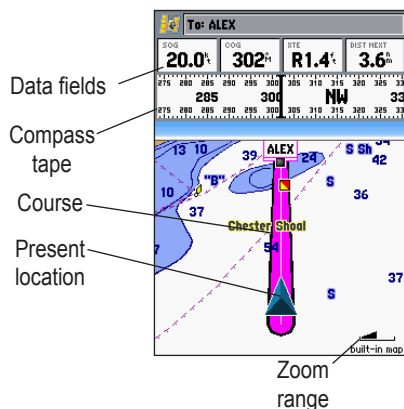
The data window, located at the top of the page, provides a user-selectable layout of various types of useful data. Each data field can be configured to show several data options. The data window layout can be configured to show additional data fields and change the size of the data shown. The round compass becomes a tape compass when the data configuration limits space. Refer to [page 30](#) for data field configuration instructions.

3D Highway Page

The 3D Highway Page provides mariner's eye perspective for guidance to a destination waypoint, placing greater emphasis on the straight-line course, and the distance and direction you are off course. As you head toward your destination, the middle of the screen provides visual guidance to your waypoint on a moving graphic highway. Your present location is at the bottom center of the 3D Highway Page. Mariner's eye perspective provides situational awareness while navigating. The line down the middle of the highway represents your course. As you navigate toward a waypoint, the highway moves—indicating the direction you are off course. To stay on course, steer toward the center of the highway.



The four data fields at the top of the page provide additional user-selectable guidance information. A compass ribbon shows your current heading along with a dark, vertical bar that indicates the direct bearing to the navigation point. When the dark vertical indicator (or arrow) lines up with the lighter red bar in the middle, you are heading directly to the navigation point. Use the 3D Highway Page as your primary navigation page in lieu of the Compass Page when your main concern is following a defined course.



Each data field at the top of the page can be configured to show several data options. The data window layout can be configured to show additional data fields and change the size of the data shown. Refer to [page 30](#) for more information.

To zoom in or out on the 3D Highway Page:

Press either the **RANGE Down** or **RANGE Up** key to increase or decrease the zoom range.

3D Highway Page Options

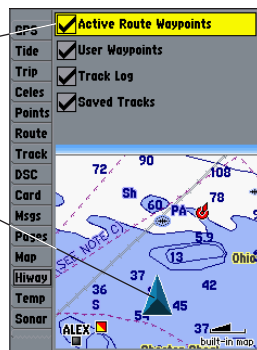
The 3D Highway options page selects the waypoints and tracks shown and shows/hides cartography.

To show and select the 3D Highway Page options:

1. Press **ADJ/MENU**. Select the **Hiway** tab.
2. Using the **ROCKER**, highlight an option, and press **ENTER**.

Check or uncheck the options you want to show or hide on the 3D Highway Page.

Preview window



3D Highway Page Setup

The following options are available from the 3D Highway Page menu:

- **Hide/Show Cartography**—toggles between hiding and showing map details. This option is only available when an optional cartography data card is inserted in the unit.
- **Setup**—selects what waypoints and tracks are shown on the 3D Highway Page. Use the **ROCKER** and **ENTER** keys to select or deselect the options.

Active Route Page

The Active Route Page shows each point of the active route, with the point name, distance and choice of Course, ETA, Fuel, Leg Distance, Leg Fuel, Leg Time, Sunrise, Sunset, or Time To for each point from your present location. The current destination point is marked with an arrow icon. As you navigate a route, the waypoint list automatically updates to indicate the next active point first. The Active Route and Route Review Pages share many of the same features and options. For more information on the Active Route Page, see [page 17](#).

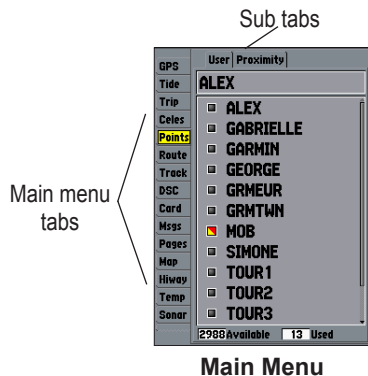
Active Route Page Options

The Active Route Page Options function the same as the Map Page Options. Refer to [pages 17-19](#) for information on the Use Map, Add Before, and Remove options.

Active Route Page

MAIN MENU

The Main Menu provides access to various waypoint, system, navigation, interface management, and setup menus. The 19 Menu tabs are divided into categories by function. The Main Menu is available from any page in the system, and is accessed by pressing and holding **ADJ/MENU**. See [page 6](#) for additional instructions on changing settings and entering data.

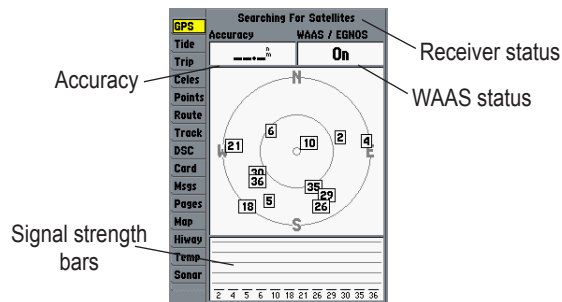


To select a Menu tab from the Main Menu:

1. Press up or down on the **ROCKER** to highlight a tab. The information for the highlighted tab automatically appears to the right. If you want to select any of the sub tab items, press right on the **ROCKER**, then press up or down to select individual items.
2. Either press **ADJ/MENU** for additional submenu options, or press **ENTER** to make changes to the highlighted item. Press left on the **ROCKER** to get back to the Main Menu.
3. Press **QUIT** to exit the Main Menu.

GPS Tab

The GPS tab provides a visual reference of satellite acquisition, receiver status, and accuracy. The status information provides an idea of what the receiver is doing at any given moment. The sky view and signal strength bars give you an indication of what satellites are visible to the receiver and whether or not they are being tracked. The signal strength is shown on a bar graph for each satellite, with the satellite number below. As the receiver locks onto satellites, a signal strength bar appears for each satellite in view.



The status field indicates “Ready for Navigation” when the GPSMAP 392/398/492/498 has collected the necessary data from satellites to calculate a fix. The unit then updates the location, date, and time.

You can use the sky view to help determine if any satellites are being blocked, and whether you have a current location fix. The sky view shows a bird’s-eye view of the position of each satellite relative to the receiver’s last known location.

The outer circle represents the horizon (north up), the inner circle 45° above the horizon, and the center point a position directly overhead. You can also set the sky view to a Track up configuration, causing the top of the sky view to align along your current track heading.

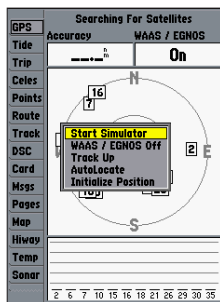
- **Searching for Satellites**—the receiver is looking for and collecting data from satellites visible at its last known or initialized position, but has not collected enough data to calculate a fix.
- **Ready for Navigation**—at least three satellites have been acquired and your location is now being calculated in latitude, longitude, and elevation.
- **Ready for Nav with WAAS**—at least three satellites and a WAAS/EGNOS satellite have been acquired and your location is now being calculated in latitude, longitude, and elevation.
- **Simulating**—the receiver is in Simulator Mode.

GPS Tab Options

The GPS tab features an options page that provides access to functions and features relating to the GPS Info Page.

To show and select the GPS Tab options:

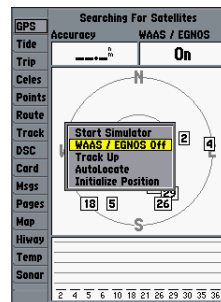
1. Press **ADJ/MENU** to open the Main Menu.
2. Using the **ROCKER**, highlight an option, and press **ENTER**.



GPS Tab Options

To Disable/Enable WAAS capability:

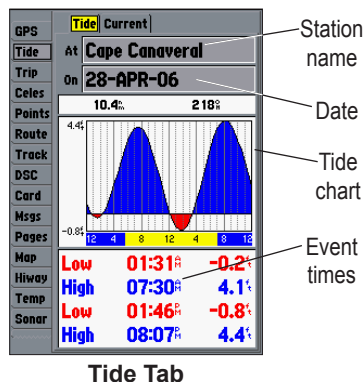
1. From the **GPS** tab, press **ADJ/MENU**.
2. Use the **ROCKER** to highlight **WAAS Off** or **WAAS On**, and press **ENTER**.



Highlight **WAAS Off**, and press **ENTER** to disable the WAAS capabilities.

Tide Tab

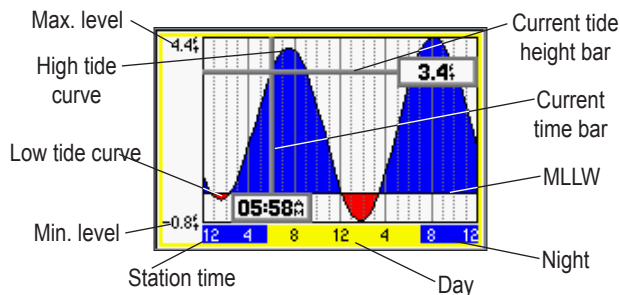
Use the Tide tab to view tide and current information. The Tide tab contains two sub tabs: Tide and Current.



Tide Sub Tab

The Tide sub tab contains a graphical chart that shows Tide Station information in a 24-hour span starting at midnight. You can choose from different dates and more than 3,000 Tide Stations around the U.S.A. coastline, Alaska, Hawaii, western Canada, and several of the Caribbean islands. The top of the Tide sub tab shows the Tide Station, the date, and the distance and bearing to the Tide Station from your location.

The bottom of the Tide chart shows a 24-hour block of local time for your location. Daytime (yellow bar) and nighttime (blue bar) at the Tide Station are shown across the time scale, with the time progressing from left to right (sunrise and sunset information might not be available for some Tide Stations). The solid, light vertical lines are in 4-hour increments, and the light, dotted vertical lines are in 1-hour increments. A solid, vertical line (with the local time at the top) indicates the tide height corresponding to the time shown in the local time box.



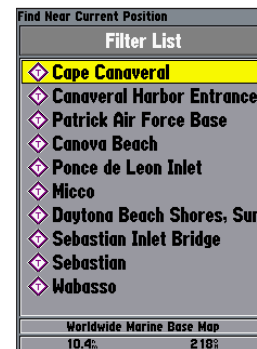
The Tide curve is shown as a shaded area, where higher tides are taller (blue) and lower tides are shorter (red). The solid, horizontal line indicates the tide height. The figure to the left of the line shows the present tide level. The Mean Lower Low Water (MLLW) appears as a solid, horizontal line near the bottom of the chart (this line appears only if the tide height range is zero or below).

The numbers on the top and bottom of the left side indicate the maximum and minimum levels. The four data fields below the chart indicate event times and levels at which the tide changes starting in the upper-left field, going downward, then to the upper-right, and down again. When comparing with other tide tables, verify the depth unit value is the same for both sources. The bottom of the chart shows the amount of time (in hours and minutes) until the next low tide and high tide.

To select the Tide Station nearest to your location:

1. Highlight the **At** field, and press **ENTER** to open the Find Tides Page.
2. Highlight **Current Position**, and press **ENTER** to open the Find Near Current Position Page.
3. Select a **Tide Station** from the list, and press **ENTER**. As you move the highlight over each Tide Station in the list, the station is highlighted on the Map window. The distance and bearing from your location to the highlighted Tide Station are shown at the bottom of the list.

If you are not within this range, the message “None Found” appears. Use the Map Position option to select a location closer to a Tide Station.



Select from a list of Tide Stations.

To select a Tide Station from a map location:

1. Highlight the **At** field, and press **ENTER** to open the Find Tides Page.
2. Highlight **Map Position**, and press **ENTER** to open the Find Near Current Position Page.
3. Press up or down on the **ROCKER** to move the map pointer to a map location, and press **ENTER**. The Find Near Other Position Page shows a list of Tide Stations near the selected map location.
4. Select a Tide Station, and press **ENTER**. If the “None Found” message appears, repeat steps 1-3 until you find a Tide Station.

Viewing Tide Information

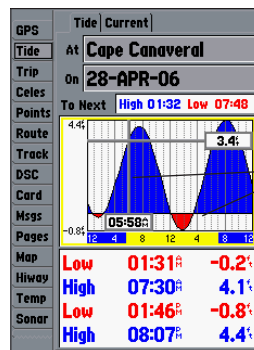
You can change the date to see tide charts for other days, or move the time bar in approximately five-minute increments to show tide heights at various times.

To change the date of the tide chart:

1. Using the **ROCKER**, highlight the **On** field, and press **ENTER**.
2. Enter a date, and press **ENTER**. The tide chart is updated to show tide information for the selected date.

To view tide heights at various times on the tide chart:

1. Highlight the tide chart.
2. Press left or right on the **ROCKER** to change the time and day. The day changes as you move past the edge of the tide chart.

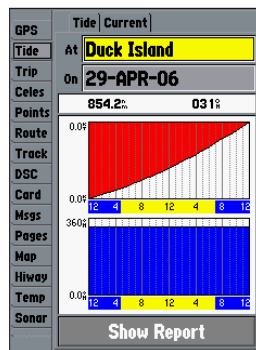


Move the **ROCKER** to see tide heights at different times. Tide data shows in a black box when in map pointer mode.

Current Sub Tab

The Current sub tab contains graphical charts showing information for currents in a 24-hour span starting at midnight. You can choose from different dates and Current Stations around the U.S.A. coastline, Alaska, Hawaii, western Canada, and several of the Caribbean islands. The top of the Current sub tab shows the current station, and the date. The bottom of the tab shows the distance and bearing from your location.

The Current sub tab contains two charts—one for speed and one for direction.



The top chart is the speed chart, which shows the speed of a given current at any point during the day. The shaded area is blue (Flood Current) when the current is heading toward shore; the shaded area is red (Ebb Current) when the current is heading away from shore.

The bottom chart is the direction chart, which shows the direction of the current at any given point during the day (based on the north reference, not true north.)

The bottom of each chart shows a 24-hour block of local time for your location. Day (yellow bar) and night (blue bar) at the Current Station appear across the time scale, with the time progressing from left to right (sunrise and sunset information may not be available for some stations). The solid, light vertical lines are in 4-hour increments, and the light, dotted vertical lines are in 1-hour increments. A solid, vertical line (with the local time at the top) indicates the strength of the current that corresponds to the time shown in the local time box.

To select the Current Station nearest to your location:

1. Highlight the **At** field, and press **ENTER** to open the Find Currents Page.
2. Highlight **Current Position**, and press **ENTER** to open the Find Near Current Position Page.

3. Select a Current Station from the list, and press **ENTER**. As you move the highlight over each Current Station in the list, the station is highlighted on the Map window. The distance and bearing from your location to the highlighted station are shown at the bottom of the list.

To select a Current Station from a map location:

1. Highlight the **At** field, and press **ENTER** to open the Find Currents Page.
2. Highlight **Map Position**, and press **ENTER** to open the Find Near Map Position Page.
3. Press up or down on the **ROCKER** to move the map pointer to a map location, and press **ENTER**. The Find Near Map Position Page shows a list of Current Stations near the selected map location.
4. Select a Current Station, and press **ENTER**. If the “None Found” message appears, repeat steps 1-3 until you find a station.

Viewing a Current Report

Press the Show Report soft key to view a detailed report of all times and values for all the minimum and maximum current flows through the day including Flood, Slack, and Max Ebb times and strengths.

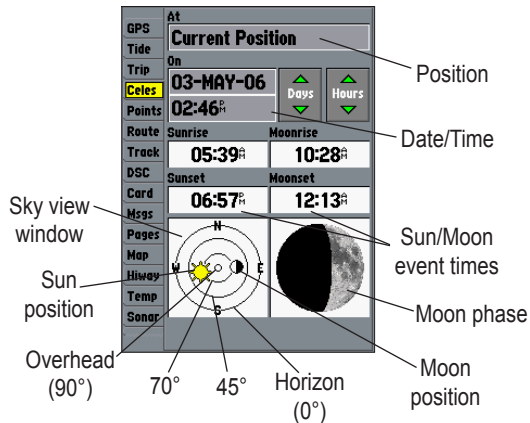
Trip Tab

The Trip tab shows the Trip Odometer, Moving Average speed, Total Average speed, Maximum Speed, Stopped Time, Moving Time, Total Time, and Odometer. To reset the data, choose from Reset Trip, Reset Max Speed, Reset Odometer, or Reset All, and press **ENTER**.

	Trip Odometer	Stopped Time
GPS	12.8%	12:27:20
Tide		
Trip	Moving Average	Moving Time
Celes	0.3%	02:25:27
Points	Total Average	Total Time
Route	0.0%	--:--:--
Track	Maximum Speed	Odometer
DSC	18.6%	0.8%
Card	Reset Trip	
Msgs	Reset Max Speed	
Pages	Reset Odometer	
Map	Reset All	
Hiway		
Temp		
Sonar		

Celes (Celestial) Tab

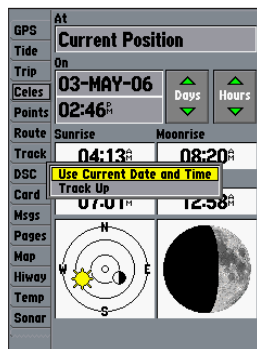
The Celestial tab shows celestial data for sun and moon rise and set, moon phase, and the approximate sky view location of the sun and moon. The moon phase shows the current visible portion of the moon as a light color. You can show this data for your present location, a location from the map, or a Find item location. You can use today's data, or select a different date and time.



To choose a different location:

1. From the **Celes** tab, highlight the **At** field, and press **ENTER**.
2. From the Find list, highlight any category, and press **ENTER**. If you want to reference a Find item, select from the Find list, and press **ENTER**.
3. Select an item from the list or tab lists, and press **ENTER**. For a location from the map, choose **Map Position**, press **ENTER**, select a location on the map, and press **ENTER**.
4. From the Find item detail page, highlight **OK**, and press **ENTER**.

The location the unit is using appears in the Date/Time/Position field. The time tables shown are based on your current time zone. When using a position from another location outside of your time zone, you need to set the time zone for that location. See [page 68](#) for more information on setting time zones.



Celestial Tab Menu

To change the time or date:

1. On the **Celestial** tab, use the **ROCKER** to highlight the **Days** or **Hours** button, and press **ENTER**. Press up or down on the **ROCKER** to change the days or hours. Press **QUIT** to exit.
OR
Highlight the **On** field, and press **ENTER**.

2. Enter a new date or time, and press **ENTER**.

To use the current date and time:

From the **Celes** tab, press **ADJ/MENU**, use the **ROCKER** to highlight **Use Current Date and Time**, and press **ENTER**.

Points Tab

The Points tab contains two waypoint sub tabs, User and Proximity, which allows you to manage a large number of waypoints quickly and efficiently. The sub tabs also provide continuously updated proximity waypoint alarms that can be used to define items, such as submerged hazards or shallow waters.



Points Tab

To select the Points sub tab:

1. Use the **ROCKER** to highlight the **Points** tab. A list of stored waypoints appear to the right of the Main Menu list.
2. Press right one time on the **ROCKER**. The **User** tab is now highlighted.
3. Press down on the **ROCKER** until a waypoint is highlighted.

User Waypoint List

The User list on the points tab shows a master list of all waypoints currently stored in memory. From the User list, you can review, edit, rename or delete individual waypoints, or delete all user waypoints. The total number of stored and available waypoints is shown at the bottom of the User page, with the stored waypoints arranged in alphanumerical order.

The following options are available:

- **New Waypoint**—allows you to create a waypoint. (See [page 8](#) for creating a waypoint)
- **Delete**—deletes selected waypoint from and waypoint list and route.
- **Delete By Symbol**—deletes waypoints that use the same symbol.
- **Delete All**—deletes all waypoints from the unit.



NOTE: When a waypoint is deleted from the list, it cannot be recovered from the unit. It is advisable to back up important waypoints to a computer using an optional PC cable and interface software or record them manually.

To show the waypoint menu options:

Using the **ROCKER**, highlight the **User** tab, and press **ADJ/MENU**.

To scroll through and review the waypoint list:

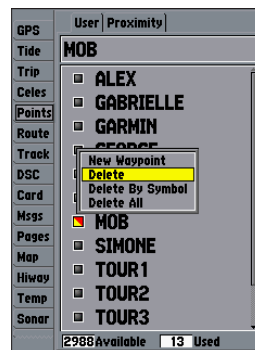
1. With the **ROCKER**, highlight the **Points** tab, and then highlight the **User** sub tab.
2. Use the **ROCKER** to scroll through the list.
3. Press **ENTER** to review the highlighted waypoint on the Waypoint Edit Page.
4. Press **ENTER** to return to the list and automatically highlight the next waypoint.

To search for a waypoint by name:

1. Highlight the name field, and press **ENTER**.
2. Use the **ROCKER** to select the first letter of the name.
3. Press right on the **ROCKER**, and enter the second letter, if you do not see the name in the list below.
4. Repeat steps 2 and 3 until the name appears. Press **ENTER** when you see the name.
5. Highlight the name on the list, and press **ENTER** again to review the waypoint. When finished, highlight **OK**, and press **ENTER**.

To delete an individual waypoint from the list:

1. Use the **ROCKER** to highlight the waypoint to delete, and press **ADJ/MENU**.
2. Highlight **Delete**, and press **ENTER**. You can also highlight the waypoint, press **ENTER**, then highlight **Delete**, and press **ENTER**.
3. Press **ENTER** to delete the selected waypoint.



To delete waypoints by symbol:

1. From the **User** sub tab, press **ADJ/MENU**. Select **Delete By Symbol**, and press **ENTER**.
2. Use the **ROCKER** to highlight the symbol of the waypoint(s) to delete, and press **ENTER**.
3. Press **ENTER** to delete the waypoint by symbol. Otherwise, choose **Cancel**, or press **QUIT**.

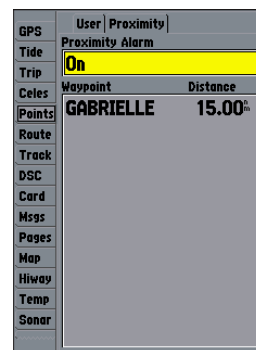
To delete all waypoints or the entire waypoint list:

1. Press **ADJ/MENU** to select the options window.
2. Use the **ROCKER** to highlight **Delete All**, and press **ENTER**.
3. Highlight **OK**, and press **ENTER** to delete all waypoints.

Proximity Waypoint List

Use the Proximity list to define an alarm circle around a stored waypoint. The alarm circle can help you avoid reefs, rocks, or restricted waters. You can add a maximum of 10 waypoints or on-screen map items to proximity alarms with a maximum alarm radius of 99.99 nautical or statute miles or kilometers.

If a proximity alarm circle overlaps with an existing alarm circle, a “Proximity Overlaps Another Proximity Waypoint” message appears. Because the unit only alerts for one of the overlap points, use caution when navigating in these areas. If your boat enters an alarm circle overlap, you are only alerted to the closest proximity waypoint.



To add a proximity waypoint:

1. On the **Points** tab, highlight the **Proximity** sub tab.
2. Press **ADJ/MENU**, and select **New Waypoint**. The **Find** screen appears. Highlight **Waypoints**, and press **ENTER**.
3. To select a waypoint from the list, use the **ROCKER** to highlight a waypoint from the **User** or **Nearest** tab.
4. Press **ENTER** to confirm. The **Distance** field is now highlighted.
5. Press **ENTER** and use the **ROCKER** to enter a proximity radius (to 99.99 units).
6. Press **ENTER**, when finished.

To turn proximity alarms on or off:

1. Use the **ROCKER** to highlight the field below **Proximity Alarm**, and press **ENTER**.
2. Select **ON** or **OFF**, and press **ENTER**.

To show the waypoint menu options:

Using the **ROCKER**, highlight the **Proximity** tab, and press **ADJ/MENU**.

To clear one or all proximity waypoints from the list:

1. Use the **ROCKER** to highlight the proximity waypoint, and press **ADJ/MENU**.
2. To clear a single alarm, highlight **Delete**, and press **ENTER**.
3. To clear all proximity waypoints, select **Delete All**, and press **ENTER**.
4. Use the **ROCKER** to highlight **OK**, and press **ENTER**.

The following options are available from the Proximity sub tab:

- **New Waypoint**—creates a waypoint and adds it to the proximity list.
- **Delete**—removes a selected waypoint from proximity list.
- **Delete All**—removes all waypoints from proximity list.

Route Tab

The Route tab shows all the routes currently stored in memory, along with a descriptive name for each route. After you create a route, you can start using it for navigation with the **NAV** key. You follow the route in the same sequence as it was originally created, or you can invert the route and navigate from the end waypoint back to the beginning waypoint. From the Route list menu, you can choose New Route (page 17), Copy, Delete, or Delete All.

If you highlight a route name from the Route List and press **NAV**, the name automatically appears.



To copy or delete a route:

1. From the **Route List**, highlight the route you want to copy or delete using the **ROCKER**, and press **ADJ/MENU**.
2. Choose either **Copy** or **Delete**, and press **ENTER**. With **OK** highlighted, press **ENTER** again to confirm a deletion. The copied route uses the same route name with an additional number, starting at 1, at the end of the route name.

To delete all routes:

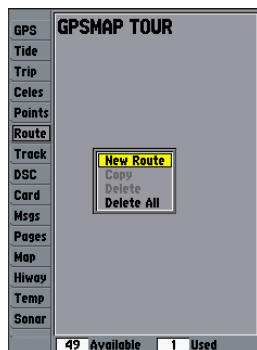
1. From the **Route List**, press **ADJ/MENU**.
2. Highlight **Delete All**, and press **ENTER**. With **OK** highlighted, press **ENTER** again to delete all routes.

Route Review Page

After you create a route, use the Route Review Page to review and modify the route shown.

To show the Route Review Page:

1. Press and hold **ADJ/MENU**, and then highlight the **Route** tab.
2. Highlight the route you want to review, and press **ENTER**.
You are now on the Route Edit Map Page.



Route List Menu



The Route Review Page also allows you to enter your own 15-character name for any listed route. By default, the name includes the first and last waypoints in the route.

To enter a custom route name:

1. From the **Route Review** Page, highlight the route you want to change, and press **ENTER**.
2. Press **ADJ/MENU**, and use the **ROCKER** to select **Edit Route Name**. Press **ENTER**.
3. Use the **ROCKER** to enter a name, and press **ENTER** when finished.

On the Route Review Page, you can review the route points (waypoints or map items) one at a time from the list.

To review individual route points:

1. Highlight a route, and press **ENTER**.
2. Press **ADJ/MENU**, highlight **Use List**, and press **ENTER**.
3. Highlight the waypoint you want to review, and press **ENTER**. On the waypoint review window, you can choose **Delete**, **Next** (highlight the next point on the route list), **Show Map** (show the point on a map window), or **Move Wpt** (permanently delete the waypoint from the unit), and press **ENTER**.

When you return to the route point list, the next point in the route is automatically highlighted. Press **ENTER** repeatedly to review each point on the route.

GPSMAP TOUR		
Waypoint	Distance	Course
TOUR1	0.0 ^m	004 [°]
TOUR2	2.3 ^m	330 [°]
TOUR3	4.8 ^m	002 [°]
TOUR4	<div>Active Route</div> <div>Use Map</div> <div>Add Before</div> <div>Remove</div> <div>Plan</div>	326 [°]
TOUR5		---
-----		---
-----		---
		17.7 ^m 337 [°]

Route Review Options Menu

Route Review Menu Options

Menu options available from the Route Review Page are Use Map, Add Before, Remove, and Plan.

Use Map—allows you to review and modify the route shown for each point (waypoint or map item) on a map page. Use the map pointer to insert a new route point on a route leg, or review the waypoint, or map item.